Manitoba Monthly Communicable Disease Report
Reported up to December 31, 2009

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 72% of all non-STI/HIV related communicable diseases reported to Manitoba Health during December 2009.

   - The number of reported cases of MRSA was above the statistically expected range in December 2009 – 256 positive lab-confirmed cases reported; less than 220 expected in an average month.

2. **Sexually Transmitted Infections (STI) & Blood-Borne Pathogens (BBP)**
   There were 447 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in December 2009:
   - 396 reported cases of chlamydia (Ct) only
   - 35 reported cases of gonorrhoea (GC) only
   - 13 reported co-infections of Ct and GC and
   - 3 reported cases of syphilis

   Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 45% of all reported chlamydia cases in the province.

   In December 2009, there were no cases of Hepatitis B virus (HBV), 33 cases of Hepatitis C virus (HCV) and 9 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
   The number of reported cases in December 2009 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Malaria – 3 positive lab-confirmed cases reported; less than 3 expected in an average month.
   - Shigellosis – 4 positive lab-confirmed cases reported; less than 4 expected in an average month.

   The expected number of cases and range is statistically based on the number of reported cases during November ('04-'08), December ('04-'08), and January ('05-'09).

Explanatory Notes:

General:

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date as symptom onset date is frequently not recorded. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

SUMMARY OF COMMUNICABLE DISEASE FOR DECEMBER 2009

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	Disease Name	2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	3	2	3	0-6	35	40
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-2		
005.8	B. CEREUS			0	0-1	1	5
320.1	BAC. MENINGITIS - PNEUM	1		1	0-2	3	4
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	9	16		***	138	156
116.0	BLASTOMYCOSIS	1	2		***	18	9
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		1
005.2	C. PERFRINGENS			1	0-3	1	3
008.43	CAMPYLOBACTER	8	10	14	7-21	223	232
558.2	CLOSTRIDIUM DIFFICILE	77	78		***	890	844
046.1	CREUTZFELD-JACOB DISEASE				***	1	3
007.8	CRYPTOSPORIDIOSIS	3		2	0-6	73	36
061.0	DENGUE FEVER			0	0-1	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS	1		0	0-1	6	3
032	DIPHTHERIA CASES		1	0	0-1	1	1
123.4	DIPHYLLOBOTHRIUM SPP	1	1	0	0-1	7	5
008.0	E. COLI-VEROTOXIGENIC	2	3	3	0-7	37	44
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	7	3	9	2-16	127	125
320.0	H.INFLUENZAE (CSF)			0	0-1		
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	3	3
041.59	HAEM. INFLUENZAE (non-B)				***	16	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		
070.1	HEPATITIS A	1		1	0-3	11	11
070.3	HEPATITIS B	1		0	0-1	5	4
070.51	HEPATITIS C	34	33	31	18-44	349	345
487.1A	INFLUENZA A (NON-pH1N1)****		1		***	78	155
487.1B	INFLUENZA B	1			***	45	38
482.83	LEGIONELLA			0	0-1	1	
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1	5	2
88.81	LYME DISEASE			0	0-1	5	1
084	MALARIA	1	3	1	0-2	12	14
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF	1	1	0	0-1	3	1
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD		1	0	0-1	2	1
B95.6	MRSA	222	256	124	29-219	2502	2808
072.9	MUMPS			0	0-1	2	5
036.89	N.MENINGITIDIS OTHER			0	0-0		7
728.86	NECROTIZING FASCIITIS		2	1	0-4	17	5
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		2
033.0	PERTUSSIS		1	5	0-13	16	30
038.2	PNEUM. SEPTICEMIA	5	5	7	2-12	112	122
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals from previous, comparable, and subsequent months for the past 5 years.

** Mean +/- 2 standard deviations of the mean.

*** Data collected for less than 5 years.

**** Excludes Influenza A Pandemic H1N1 (pH1N1). There were 100 cases of pH1N1 in December 2009.

SUMMARY OF COMMUNICABLE DISEASE FOR DECEMBER 2009

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	Disease Name	2008	2009	Expected*	Ex. Range**	2008	2009
083.0	Q FEVER			0	0-0	1	1
056.9	RUBELLA			0	0-0		2
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER	1	2	1	0-3	4	12
003.0	SALMONELLA	13	22	14	0-29	237	266
120	SCHISTOSOMIASIS			0	0-1		1
004	SHIGELLOSIS	1	4	1	0-3	29	23
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	
481.9	STREP PNEUMONIA - PR			0	0-1	1	
041.1	STREP PYOGENES - OTHER STERILE	6	2		***	49	96
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK	1	1	0	0-1	1	1
481	STREPTOCOCCUS PNEUMONIAE			0	0-0	2	
127.2	STRONGYLOIDES			1	0-5	6	11
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-0		
013	TUBERCULOSIS - NON-RESP.	4		2	0-4	23	27
010	TUBERCULOSIS - PRIM.	3		1	0-3	9	9
011	TUBERCULOSIS - RESP	11	9	6	0-12	109	120
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID			0	0-0	1	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	14	5		***	94	93
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROMES				***	2	
008.44	YERSINIA ENTEROCOLITICA	2		0	0-1	16	8
		435	**464**			**5333**	**5740**

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR DECEMBER 2009

		<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing Age/Gend	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
006.9	AMEBIASIS																1	1											2
036.0	BAC.MGTS-NMGTS(MGCCL MGTS				1																								1
038.0	BETA STREP SEPTICEMIA	2			1							1				1		1	1	1	3		2	1			2		16
116.0	BLASTOMYCOSIS											1				1													2
008.43	CAMPYLOBACTER			2			1					1					1		1		1		1		2				10
558.2	CLOSTRIDIUM DIFFICILE			1								2				1	1	2	2	5	4	10	6	6	11	16	11		78
032	DIPH. CASES																		1										1
123.4	DIPHYLLOBOTHRIUM															1													1
008.0	E. COLI 0157				1															2									3
007.1	GIARDIA LAMBLIA				1									1		1													3
070.51	HEPATITIS C									1				3	2	2	3	3	7	2	6		1				3		33
487.1A	INFLUENZA A (NON-pH1N1)				1																								1
084	MALARIA									1		1			1														3
036.2	MENINGOCOCCEMIA(MGCCEMIA											1																	1
B95.6	MRSA	3	10	17	18	8	5	8	5	7	8	9	6	14	7	16	13	8	12	15	12	7	11	9	11	13	4		256
728.86	NECROTIZING FASCIITIS																	1		1									2
033.0	PERTUSSIS	1																											1
038.2	PNEUM. SEPTICEMIA			1										1			1			1				1					5
003.0	SALMONELLA				1	2				1	2	2			2	2	1		1	1	2	2		1	1	1			22
004	SHIGELLOSIS																	1				1	1	1					4
041.1	STREP PYOGENES - OTHER ST															1									1				2
041.2	STREP.PNEUM.OTHER																				1	1							2
040.89	STREPTOCOCCAL TOXIC SHOCK																				1								1
011	TUBERCULOSIS - RESP													1	1		2		3	1			1						9
B96.8	VANCOMYCIN RES. ENTER.																				1				3		1		5
		6	10	21	24	10	6	8	5	10	10	18	6	20	13	26	23	17	28	29	31	21	23	19	29	30	21		464

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR DECEMBER 2009

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
*Case Referred to:**				*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	1													1								2
036.0	BAC.MGTS-NMGTS(MGCCL MGTS										1												1
038.0	BETA STREP SEPTICEMIA	12					2		1										1				16
116.0	BLASTOMYCOSIS	1									1												2
008.43	CAMPYLOBACTER	8									1		1										10
558.2	CLOSTRIDIUM DIFFICILE	56	4				2		5		5		1		3				1		1		78
032	DIPH. CASES	1																					1
123.4	DIPHYLLOBOTHRIUM	1																					1
008.0	E. COLI 0157	1	1				1																3
007.1	GIARDIA LAMBLIA								1						1		1						3
070.51	HEPATITIS C	22	1		1			2			2		2		2				1				33
487.1A	INFLUENZA A (NON-pH1N1)	1																					1
084	MALARIA	3																					3
036.2	MENINGOCOCCEMIA(MGCCEMIA	1																					1
B95.6	MRSA	74	1	3	2		2		4	1	3		3	3	2		11	139	8				256
728.86	NECROTIZING FASCIITIS	1																				1	2
033.0	PERTUSSIS	1																					1
038.2	PNEUM. SEPTICEMIA	4	1																				5
003.0	SALMONELLA	10	1		2		3				1	1			1		1	2					22
004	SHIGELLOSIS	4																					4
041.1	STREP PYOGENES - OTHER ST	1								1													2
041.2	STREP.PNEUM.OTHER			1			1																2
040.89	STREPTOCOCCAL TOXIC SHOCK																		1				1
011	TUBERCULOSIS - RESP	6																3					9
B96.8	VANCOMYCIN RES. ENTER.	3					1											1					5
		212	9	4	5		12	2	11	2	14	1	7	3	10		13	145	12		1	1	464

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province

STD Infection Summary Report - December 2009

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	**2008**	**2009**	**2008**	**2009**
All Chlamydia Infections	537	409	6969	6348
All Gonorrhea Infections (including PRNG)	95	48	1380	1038
All Syphilis Infections	5	3	62	48
Gonorrhea & Chlamydia Co-infections	42	13	617	426
HIV	3	9	88	108

Total Number of STD Cases by Age and Gender - December 2009

	<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing	
Disease Name	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**age/gender**	**TOTAL**
Chlamydia Only Cases							8	2	96	32	82	52	38	27	26	19	2	4	2	5		1						396
Gonorrhea Only Cases									6	3	4	6	3	4	2	4	1	1		1								35
Syphilis Only Cases									1									1						1				3
GC and CT Cases									5	1	4			1	1			1										13
							8	2	108	36	90	58	41	32	29	23	3	7	2	6		1		1				447
HIV									1	1	1			1	1	1		3										9

Regional STD Distribution - December 2009

Disease/Infection	**Winnipeg**	**Brandon**	**N. Eastman**		**S. Eastman**		**Interlake**		**Central**		**Assiniboine**		**Parkland**		**Norman**		**Burntwood**		**Churchill**	**OOP**	**Missing**	**TOTAL**
Case Referred to:*			***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***				
All Chlamydia Infections	200	21	8	4		8	5	19		25		5	1	11	2	19	51	22	1	5	2	409
All Gonorrhea Infections	22		3	3		1	2	1		3				1	1		9	2				48
All Syphilis Infections	3																					3
GC and CT Infections	6		1			1	1								1		2	1				13

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province